

## PATENT APPLICATION

## NITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Paula S. NEWMAN

Group Art Unit: 2175

Application No.: 09/683,274

Examiner:

N. Abel-Jalil

Filed: December 6, 2001

Docket No.:

110142

For:

LIGHTWEIGHT SUBJECT INDEXING FOR EMAIL COLLECTIONS

## REQUEST FOR RECONSIDERATION

RECEIVED

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

MAY 2 1 2004

Technology Center 2100

Sir:

In reply to the April 7, 2004 Office Action and the May 11, 2004 personal interview, reconsideration of the above-identified application is respectfully requested. Claims 1-37 are pending.

Applicant appreciates the courtesies shown to Applicant's representative by Examiner Abel-Jalil and Examiner Popovici in the May 11, 2004 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

Applicant appreciates the indication of allowability for claims 4-7 and 20-23. For the reasons discussed below, Applicant respectfully submits that claims 1-37 are allowable.

Claims 1-3, 8-19 and 24-37 were rejected under 35 U.S.C. §103(a) over Meyer et al. ("Meyer"), U.S. Publication No. 2002/0143871 in view of Rhodes et al. ("Rhodes"), U.S. Patent No. 6,236,768. The rejection is respectfully traversed.

The combination of Meyer and Rhodes fails to disclose or suggest a light weight subject indexing system with a candidate headword identification system for identifying candidate words in the subject line of a document which are not listed in a user modified common word list as recited in claim 1 and as similarly recited in claims 17 and 33.

As discussed during the personal interview, Meyer performs a meta-content analysis and annotation upon email documents so as to create a displayable index of the meta-content (paragraph [0008], lines 1-6). In order to create the meta-content index, meta-content extraction of semantic foci within a document including, for example, dates, email addresses, names of people and names of organizations, is performed using a weighted system (paragraph [0009], lines 1-5). This information is extracted from one or more of the header, the body and any attachments (paragraph [0011]). The meta-content index is then combined with the header and the body to provide an enhanced document (paragraph [0014] and Fig. 1).

Meyer fails to use the words "common word list" or to disclose removing words that are in a common word list. In fact, Meyer discloses the opposite of claims 1, 17 and 33 because Meyer is looking for specific words based on a weighted system rather than identifying random words that are not included in a user modified common word list. By identifying words that are not included in a user modified common word list, a user can search through an index to see if the index includes a random word that is of interest. Meyer can not obtain this advantage by looking for specific words based on a weighted system.

Meyer only states that the meta-content extraction is performed by using, for example, commercially available software (paragraph [0068]). In performing the extraction, a text summary is returned that can be used in an index. In creating the summary, the words in the message subject line can be used as weighting elements (paragraph [0068], lines 7-9). In this regard, Meyer teaches away from identifying candidate words in the subject line or using a common word list or a user modified common word list to identify candidate words because Meyer only uses the words in the subject line for a weighted system.

Rhodes performs an automatic, context-dependent retrieval of information. In performing this retrieval, as discussed in the Background of the Invention, a remembrance agent is used in order to retrieve documents while a document is being written. The remembrance agent creates vectors in three steps. The steps include the removal of common words, the stemming of the words, and the vectorization of the remaining text into a document vector (col. 2, lines 25-36). After vectorization occurs, an analysis module 133 either generates search queries or responds to a search query from a user in order to supply a ranked list of the most relevant documents. In determining the relevance of a document, a wide range of information can be used, for example, the subject line.

Although Rhodes may remove common words from a document in order to simplify the analysis, Rhodes fails to provide any disclosure or suggestion with regard to the use of a user modified common word list. Like Meyer, Rhodes uses a weighted system in order to extract different fields (col. 11, lines 11 and 12). As argued in the personal interview, a user modified common word list is not the same as a common word list. As discussed in Applicant's specification and as further clarified in claim 2, Applicant distinguishes between a common word list and a user modified common word list. A user modified common word list is a common word list that has been modified by a user. Rhodes fails to disclose removing or adding words from/to a common word list. Rhodes only removes words listed in a common word list in order to simplify analysis. As argued during the personal interview, the use of "user modified" must be given weight in order to distinguish from a common word list. Accordingly, a user modified common word list cannot be given the same meaning as a common word list. As such, Rhodes also fails to identify candidate words which are not listed in a user modified common word list.

As argued at the interview, should the Examiner maintain that a user's specifying of a search in col. 13, lines 20-48 of Rhodes corresponds to Applicant's user modified common

word list, then Rhodes fails to identify candidate words, which are not listed in a user modified common word list. In particular, the cited passage of Rhodes uses the user's information in order to identify a particular kind of document. This is opposite of claims 1, 17 and 33, because candidate words are words that are <u>not</u> listed in a user modified common word list.

Secondly, neither Meyer nor Rhodes discloses a lexical context system for creating a lexical context for an identified candidate headword as recited in claim 1 and as similarly recited in claims 17 and 33.

In Meyer and Rhodes, content from a subject line may be obtained. However, it is more likely that content is not obtained from the subject line because the subject line in both Meyer and Rhodes is only a small part of the overall document. Meyer and Rhodes also fail to create any lexical context for any word that was identified from a subject line of a document. In fact, Meyer and Rhodes fails to provide any context for any particular word because bother Meyer and Rhodes create summaries for a particular document. As argued, obtaining content is not the same as creating lexical context.

In Meyer, meta-content analysis is performed by extracting semantic foci from one or more of the header, the body and any attachment. Although content may be extracted from a header, a meta-context index is only used to clarify and summarize a document (paragraph [0093]). Meyer fails to disclose or suggest also creating lexical context for a word or a candidate headword from a subject line in addition to creating context for a document. Rhodes also fails to disclose or suggest providing lexical context for a word because Rhodes is only concerned with creating context in order to clarify and summarize a document (col. 11, line 11 - col. 12, line 52).

Third, neither Meyer nor Rhodes disclose or suggest a ranking system for ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index as recited in claims 1 and as similarly recited in claims 17 and 33.

Although Meyer and Rhodes may create a meta-context index or rank the relevance of documents, neither Meyer nor Rhodes disclose or suggest ranking a set of candidate headwords that are in the subject line of a document. As discussed above, Meyer and Rhodes only rank and select documents. Meyer and Rhodes do not rank and select identified candidate headwords for inclusion in an index.

In view of the foregoing, Applicant submits that neither Meyer nor Rhodes discloses or suggests the features recited in claims 1, 17 and 33 or the additional features recited in the dependent claims. It is respectfully requested that the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-37 are earnestly solicited.

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Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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Date: May 20, 2004

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